

chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

5-9 6-7 7-8 9-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

6-7

exact bonds :

5-9 7-8 9-10

normalized bonds :

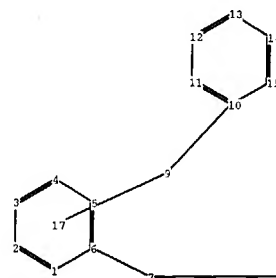
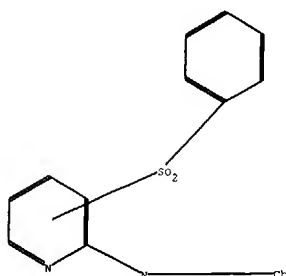
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom



chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

6-7 7-8 9-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

6-7

exact bonds :

7-8 9-10

normalized bonds :

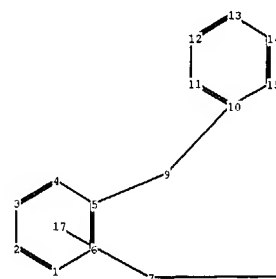
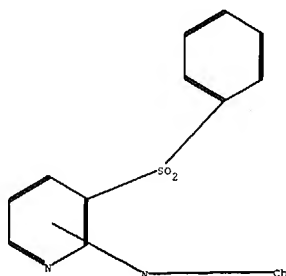
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 17:CLASS



chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

5-9 7-8 9-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact bonds :

5-9 7-8 9-10

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 17:CLASS

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

<u>NEWS 1</u>		Web Page URLs for STN Seminar Schedule - N. America
<u>NEWS 2</u>		"Ask CAS" for self-help around the clock
<u>NEWS 3</u>	May 12	EXTEND option available in structure searching
<u>NEWS 4</u>	May 12	Polymer links for the POLYLINK command completed in REGISTRY
<u>NEWS 5</u>	May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAPlus
<u>NEWS 6</u>	May 27	CAPlus super roles and document types searchable in REGISTRY
<u>NEWS 7</u>	Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
<u>NEWS 8</u>	Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)
<u>NEWS 9</u>	Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
<u>NEWS 10</u>	Jul 30	BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting
<u>NEWS 11</u>	AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
<u>NEWS 12</u>	AUG 02	CAPlus and CA patent records enhanced with European and Japan Patent Office Classifications
<u>NEWS 13</u>	AUG 02	STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting
<u>NEWS 14</u>	AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
<u>NEWS 15</u>	AUG 04	Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004
<u>NEWS 16</u>	AUG 27	BIOCOMMERCE: Changes and enhancements to content coverage
<u>NEWS 17</u>	AUG 27	BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
<u>NEWS 18</u>	SEP 01	INPADOC: New family current-awareness alert (SDI) available
<u>NEWS 19</u>	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
<u>NEWS 20</u>	SEP 01	New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
<u>NEWS EXPRESS</u>	JULY 30	CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
<u>NEWS HOURS</u>		STN Operating Hours Plus Help Desk Availability
<u>NEWS INTER</u>		General Internet Information
<u>NEWS LOGIN</u>		Welcome Banner and News Items
<u>NEWS PHONE</u>		Direct Dial and Telecommunication Network Access to STN
<u>NEWS WWW</u>		CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 19:22:32 ON 01 SEP 2004

=> file req

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

h eb c g cg b cg

eb

FILE 'REGISTRY' ENTERED AT 19:22:38 ON 01 SEP 2004  
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STRUCTURE FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7  
 DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more  
 information enter HELP PROP at an arrow prompt in the file or refer  
 to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

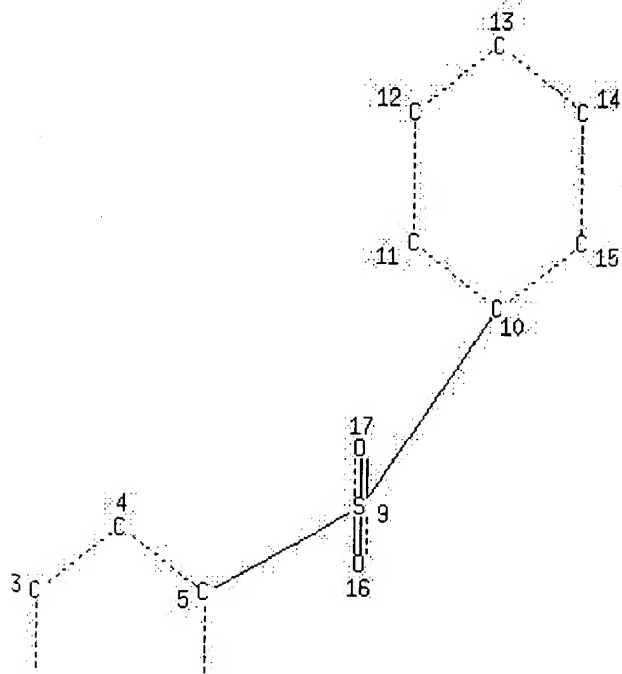
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L1 STRUCTURE UPLOADED

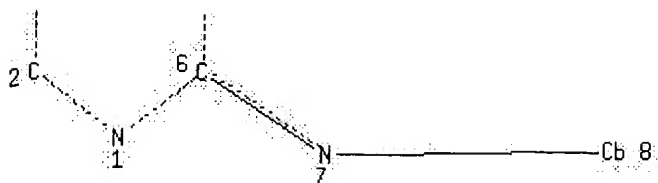
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L1 HAS NO ANSWERS

L1 STR



Page 1-A



Page 2-A

## NODE ATTRIBUTES:

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NSPEC	IS R	AT	2
NSPEC	IS R	AT	3
NSPEC	IS R	AT	4
NSPEC	IS R	AT	5
NSPEC	IS R	AT	6
NSPEC	IS C	AT	7
NSPEC	IS C	AT	8
NSPEC	IS C	AT	9
NSPEC	IS R	AT	10
NSPEC	IS R	AT	11
NSPEC	IS R	AT	12
NSPEC	IS R	AT	13
NSPEC	IS R	AT	14
NSPEC	IS R	AT	15
NSPEC	IS C	AT	16
NSPEC	IS C	AT	17

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 7 9 16 17

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=&gt; s 1.1

SAMPLE SEARCH INITIATED 19:24:34 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 61 TO ITERATE

100.0% PROCESSED 61 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 752 TO 1688

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=&gt; s 1.1 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 19:24:37 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 944 TO ITERATE

100.0% PROCESSED 944 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	156.26	156.47

FILE 'HCAPLUS' ENTERED AT 19:24:40 ON 01 SEP 2004  
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FILE COVERS 1907 - 1 Sep 2004 VOL 141 ISS 10  
 FILE LAST UPDATED: 31 Aug 2004 (20040831/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 0 L3

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.36	158.83

FILE 'REGISTRY' ENTERED AT 19:24:46 ON 01 SEP 2004  
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 DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

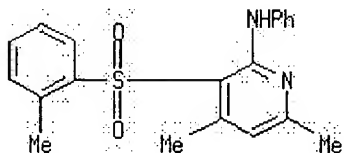
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d 1.3

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 338956-82-4 REGISTRY  
 CN 2-Pyridinamine, 4,6-dimethyl-3-[(2-methylphenyl)sulfonyl]-N-phenyl- (9CI)  
 (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C20 H20 N2 O2 S  
 SR Chemical Library  
 LC STN Files: CHEMCATS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.19	161.02

FILE 'HCAPLUS' ENTERED AT 19:24:53 ON 01 SEP 2004

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=> d his

(FILE 'HOME' ENTERED AT 19:22:32 ON 01 SEP 2004)

FILE 'REGISTRY' ENTERED AT 19:22:38 ON 01 SEP 2004

L1 STRUCTURE UPLOADED  
 L2 0 S L1  
 L3 1 S L1 FULL



FILE 'HCAPLUS' ENTERED AT 19:24:40 ON 01 SEP 2004  
L4 0 S L3

FILE 'REGISTRY' ENTERED AT 19:24:46 ON 01 SEP 2004

FILE 'HCAPLUS' ENTERED AT 19:24:53 ON 01 SEP 2004

=> s l3

L5 0 L3

=> file reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
2.36	163.38

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 19:25:02 ON 01 SEP 2004  
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DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

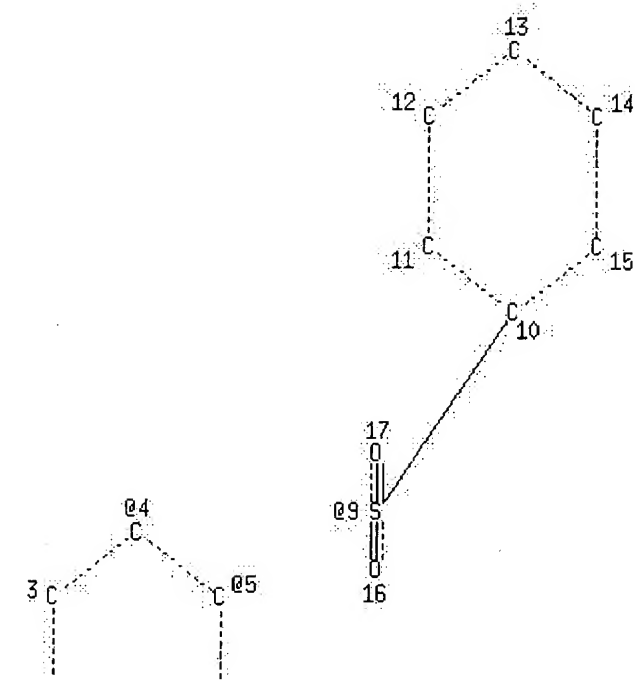
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L6 STRUCTURE UPLOADED

=> d l3

L6 HAS NO ANSWERS

L6 STR



Page 1-A



Page 2-A

VPA 9-2/4/5 S

NODE ATTRIBUTES:

NSPEC	IS R	AT	1
NSPEC	IS R	AT	2
NSPEC	IS R	AT	3
NSPEC	IS R	AT	4
NSPEC	IS R	AT	5
NSPEC	IS R	AT	6
NSPEC	IS C	AT	7
NSPEC	IS C	AT	8
NSPEC	IS C	AT	9
NSPEC	IS R	AT	10
NSPEC	IS R	AT	11
NSPEC	IS R	AT	12
NSPEC	IS R	AT	13
NSPEC	IS R	AT	14
NSPEC	IS R	AT	15
NSPEC	IS C	AT	16
NSPEC	IS C	AT	17

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 7 9 16 17

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=> s 15

SAMPLE SEARCH INITIATED 19:25:53 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 2031 TO ITERATE

49.2% PROCESSED 1000 ITERATIONS 0 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 37917 TO 43323  
PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

=> s 16 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
FULL SEARCH INITIATED 19:25:57 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 40720 TO ITERATE

100.0% PROCESSED 40720 ITERATIONS 5 ANSWERS  
SEARCH TIME: 00.00.01

L8 5 SEA SSS FUL L6

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.84	319.22

FILE 'HCAPLUS' ENTERED AT 19:26:00 ON 01 SEP 2004  
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FILE COVERS 1907 - 1 Sep 2004 VOL 141 ISS 10  
FILE LAST UPDATED: 31 Aug 2004 (20040831/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 18

L9 4 L8

=> s 19 and hartz, r?/au

h eb c g cg b cg

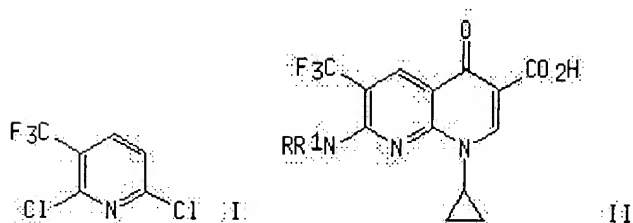
eb

37 HARTZ, R?/AU  
 L10 0 L9 AND HARTZ, R?/AU  
 => s 19 and arvanitis, a?/au  
 49 ARVANITIS, A?/AU  
 L11 0 L9 AND ARVANITIS, A?/AU  
 => d 19, ibib abs Fhitstr, 1-4

L9 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Cited References
-----------	------------------

ACCESSION NUMBER: 1991:142933 HCAPLUS  
 DOCUMENT NUMBER: 114:142933  
 TITLE: Synthesis of 7-amino-1,4-dihydro-4-oxo-6-(trifluoromethyl)-1,8-naphthyridines. The use of methylidenemalonate as an activating group and a sulfur assisted cyclization  
 AUTHOR(S): Bridge, A. J.; Sanchez, J. P.  
 CORPORATE SOURCE: Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105, USA  
 SOURCE: Journal of Heterocyclic Chemistry (1990), 27(6), 1527-36  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 114:142933  
 GI



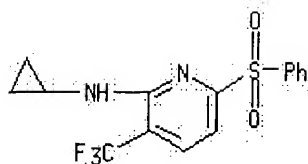
AB Dichloro(trifluoromethyl)pyridine (I) was used to develop a 6-step prepn. of enoxacin analogs, aminooxo(trifluoromethyl)naphthyridines [II, RR1 = (CH<sub>2</sub>)<sub>2</sub>NH(CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>CH(CH<sub>2</sub>NH<sub>2</sub>)CH<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>CH(NH<sub>2</sub>)CH<sub>2</sub>]. The CF<sub>3</sub> group deactivated the pyridine ring towards both nucleophiles and electrophiles. A new reagent for pyridone annulation, the (aminomethylidene)malonate anion, is described, along with several strategies to manipulate the electron d. of substituted pyridines.

IT **132844-51-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

RN 132844-51-0 HCAPLUS

CN 2-Pyridinamine, N-cyclopropyl-6-(phenylsulfonyl)-3-(trifluoromethyl)-  
 (9CI) (CA INDEX NAME)



L9 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Chemical References
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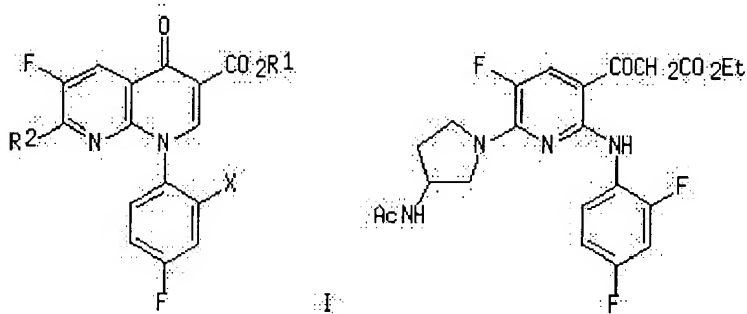
ACCESSION NUMBER: 1987:477777 HCAPLUS  
 DOCUMENT NUMBER: 107:7777  
 TITLE: 1,4-Dihydro-4-oxo-1,8-naphthyridines useful as antibacterials  
 INVENTOR(S): Todo, Yozo; Yamafuji, Tetsuo; Nagumo, Katsuyuki; Kitayama, Isao; Nagaki, Hideyoshi; Miyajima, Mikako; Konishi, Yoshinori; Narita, Hirokazu; Takano, Shuntaro; Seikawa, Isamu  
 PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan  
 SOURCE: Fr. Demande, 146 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>FR 2576305</u>	A1	19860725	<u>FR 1986-871</u>	19860122
<u>FR 2576305</u>	B1	19910419		
<u>JP 61171469</u>	A2	19860802	<u>JP 1985-9191</u>	19850123
<u>JP 06029247</u>	B4	19940420		
<u>JP 61189269</u>	A2	19860822	<u>JP 1985-28397</u>	19850218
<u>JP 06029246</u>	B4	19940420		
<u>JP 61204184</u>	A2	19860910	<u>JP 1985-43644</u>	19850307
<u>JP 06065670</u>	B4	19940824		
<u>JP 61229879</u>	A2	19861014	<u>JP 1985-69061</u>	19850403
<u>JP 06065671</u>	B4	19940824		
<u>JP 61257985</u>	A2	19861115	<u>JP 1985-97065</u>	19850508
<u>JP 06062619</u>	B4	19940817		
<u>JP 61289088</u>	A2	19861219	<u>JP 1985-129323</u>	19850614
<u>JP 06065672</u>	B4	19940824		
<u>AT 8600072</u>	A	19901115	<u>AT 1986-72</u>	19860114
<u>AT 392789</u>	B	19910610		
<u>GB 2170804</u>	A1	19860813	<u>GB 1986-1045</u>	19860116
<u>GB 2170804</u>	B2	19890920		
<u>US 4704459</u>	A	19871103	<u>US 1986-819821</u>	19860117
<u>FI 8600250</u>	A	19860724	<u>FI 1986-250</u>	19860120
<u>FI 83313</u>	B	19910315		
<u>FI 83313</u>	C	19910625		
<u>DE 3601517</u>	A1	19860821	<u>DE 1986-3601517</u>	19860120
<u>DE 3601517</u>	C2	19891116		
<u>DE 3637679</u>	C1	19920827	<u>DE 1986-3637679</u>	19860120
<u>DE 3641633</u>	C2	19971030	<u>DE 1986-3641633</u>	19860120
<u>AU 8652543</u>	A1	19860731	<u>AU 1986-52543</u>	19860121
<u>AU 576657</u>	B2	19880901		
<u>DK 8600322</u>	A	19860724	<u>DK 1986-322</u>	19860122
<u>DK 169570</u>	B1	19941205		
<u>NO 8600226</u>	A	19860724	<u>NO 1986-226</u>	19860122
<u>NO 163227</u>	B	19900115		

<u>NO 163227</u>	C	19900425		
<u>NL 8600138</u>	A	19860818	<u>NL 1986-138</u>	19860122
<u>NL 192986</u>	B	19980302		
<u>NL 192986</u>	C	19980703		
<u>SE 8600274</u>	A	19860910	<u>SE 1986-274</u>	19860122
<u>SE 462164</u>	B	19900514		
<u>SE 462164</u>	C	19900906		
<u>ZA 8600475</u>	A	19860924	<u>ZA 1986-475</u>	19860122
<u>ES 551134</u>	A1	19861216	<u>ES 1986-551134</u>	19860122
<u>CN 86100879</u>	A	19861217	<u>CN 1986-100879</u>	19860122
<u>CN 1019012</u>	B	19921111		
<u>CH 667456</u>	A	19881014	<u>CH 1986-235</u>	19860122
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<u>CN 1027067</u>	B	19941221		
<u>IL 77688</u>	A1	19910131	<u>IL 1986-77688</u>	19860123
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<u>IL 92401</u>	A1	19910131	<u>IL 1986-92401</u>	19860123
<u>ES 557077</u>	A1	19870816	<u>ES 1986-557077</u>	19860919
<u>ES 557078</u>	A1	19870816	<u>ES 1986-557078</u>	19860919
<u>US 4851535</u>	A	19890725	<u>US 1987-67264</u>	19870629
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<u>GB 2204040</u>	B2	19890920		
<u>SE 469983</u>	B	19931018	<u>SE 1989-2264</u>	19890621
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			<u>JP 1985-28397</u>	19850218
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JP 1985-129323	19850614
AT 1986-72	19860114
GB 1986-1045	19860116
DE 1986-3601517	19860120
FI 1986-250	19860120
CH 1986-235	19860122
NL 1986-138	19860122
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IL 1986-77688	19860123
US 1986-819821	19860617

OTHER SOURCE(S): CASREACT 107:77777  
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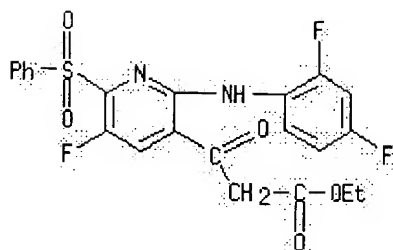
AB The title compds. [I; R1 = H, CO2H-protecting group; R2 = H, OH, N3, (protected) 3-amino-1-pyrrolidinyl, etc.; X = H, F] and their salts, useful as antibacterials, are prepd. Refluxing a mixt. of nicotinoylacetate II in benzene contg. (MeO)2CHNMe2 for 7 h gave 84.2% I (R1 = Et, R2 = 3-acetamido-1-pyrrolidinyl, X = F). The min. inhibitory concns. of I.HCl (R1 = H; R2 = 3-amino-1-pyrrolidinyl; X = F) against a variety of common bacteria ranged <0.02-0.2 µg/mL. I in general may be administered in the form of tablets, capsules, powders, syrups, etc.

IT 105152-64-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for antibacterial)

RN 105152-64-5 HCAPLUS

CN 3-Pyridinepropanoic acid, 2-[(2,4-difluorophenyl)amino]-5-fluoro-β-oxo-6-(phenylsulfonyl)-, ethyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

Full  
Text

References

ACCESSION NUMBER: 1986:608850 HCAPLUS  
DOCUMENT NUMBER: 105:208850  
TITLE: 1-(Aryl-substituted)-1,4-dihydro-6-fluoro-4-oxonaphthyridines and intermediates for their preparation

PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd. , Japan  
 SOURCE: Belg., 152 pp.  
 CODEN: BEXXAL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 904086	A1	19860722	BE 1986-216165	19860122
JP 61171469	A2	19860802	JP 1985-9191	19850123
JP 06029247	B4	19940420		
JP 61189269	A2	19860822	JP 1985-28397	19850218
JP 06029246	B4	19940420		
JP 61204184	A2	19860910	JP 1985-43644	19850307
JP 06065670	B4	19940824		
JP 61257985	A2	19861115	JP 1985-97065	19850508
JP 06062619	B4	19940817		
DE 3641633	C2	19971030	DE 1986-3641633	19860120
AU 8652543	A1	19860731	AU 1986-52543	19860121
AU 576657	B2	19880901		
ZA 8600475	A	19860924	ZA 1986-475	19860122
CN 86100879	A	19861217	CN 1986-100879	19860122
CN 1019012	B	19921111		
CH 669378	A	19890315	CH 1988-642	19860122
CH 671957	A	19891013	CH 1988-643	19860122
IL 88468	A1	19910131	IL 1986-88468	19860123
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US 4851535	A	19890725	US 1987-67264	19870629
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NO 167804	C	19911211		
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AT 394193	B	19920210		
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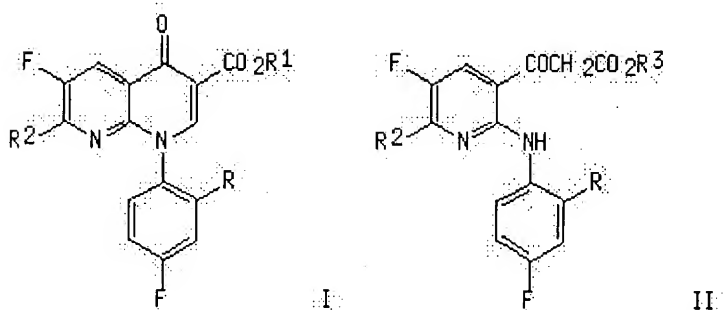
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<u>AT 1986-72</u>	19860114
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OTHER SOURCE(S): CASREACT 105:208850  
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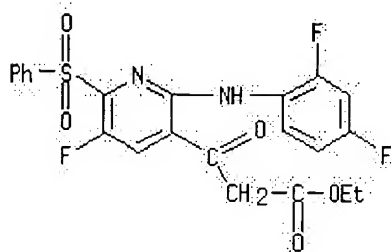
AB Bactericidal naphthyridines I [R = H, F; R1 = H, protective group; R2 = halo, OH, N3, (substituted) alkoxy, alkylthio, arylthio, alkylsulfinyl, arenesulfinyl, alkylsulfonyl, phosphinyloxy, 3-aminopyrrolidino, piperazino, etc.] were prepd. by cyclization of fluoronicotinylacetates II (R3 = protective group) with formamide acetals (R4O)(R5O)CHNR6R7 (III; R4, R5 = alkyl, cycloalkyl; R4R5 = alkylene; R6, R7 = alkyl, NR6R7 = heterocycle). This cyclization was demonstrated using numerous III for prepn. of several I. Thus, II (R = F, R2 = 3-acetylaminopyrrolidino; R3 = Et), which was prepd. in ~6 steps from H2NC6H3F2-2,4, reacted with (MeO)2CHNMe2 to give 88.1% I (R1 = Et). I.2HCl (R = H, F; R1 = H, R2 = 3-aminopyrrolidino) was bactericidal against gram-pos. and gram-neg. bacteria in vitro, with MIC's of  $\leq 0.05$ -0.2  $\mu\text{g/mL}$ .

IT 105152-64-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction of)

RN 105152-64-5 HCAPLUS

CN 3-Pyridinepropanoic acid, 2-[(2,4-difluorophenyl)amino]-5-fluoro- $\beta$ -oxo-6-(phenylsulfonyl)-, ethyl ester (9CI) (CA INDEX NAME)



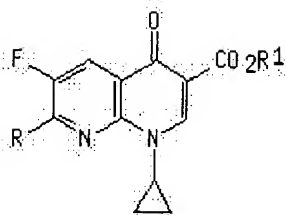
L9 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
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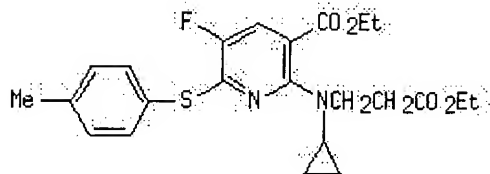
ACCESSION NUMBER: 1985:220858 HCAPLUS  
 DOCUMENT NUMBER: 102:220858  
 TITLE: 1,8-Naphthyridine derivatives  
 INVENTOR(S): Matsumoto, Junichi; Nakamura, Shinichi; Miyamoto, Teruyuki; Uno, Hitoshi  
 PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd. , Japan  
 SOURCE: Eur. Pat. Appl., 69 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 132845	A2	19850213	EP 1984-108822	19840725
EP 132845	A3	19850911		
EP 132845	B1	19880413		
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JP 60028978	A2	19850214	JP 1983-138000	19830727
JP 03073548	B4	19911122		
JP 60260577	A2	19851223	JP 1984-117266	19840606
JP 05068477	B4	19930929		
CS 274601	B2	19910915	CS 1984-5575	19840719
AU 8430910	A1	19850131	AU 1984-30910	19840720
AU 565898	B2	19871001		
US 4649144	A	19870310	US 1984-632853	19840720
ZA 8405708	A	19850327	ZA 1984-5708	19840724
CA 1327580	A1	19940308	CA 1984-459527	19840724
AT 33494	E	19880415	AT 1984-108822	19840725
DK 8403651	A	19850128	DK 1984-3651	19840726
DK 160276	B	19910218		
DK 160276	C	19910722		
FI 8402987	A	19850128	FI 1984-2987	19840726
FI 77862	B	19890131		
FI 77862	C	19890510		
HU 34976	O	19850528	HU 1984-2875	19840726
HU 194561	B	19880229		
DD 228256	A5	19851009	DD 1984-265685	19840726
ES 534624	A1	19851216	ES 1984-534624	19840726
SU 1482527	A3	19890523	SU 1984-3773894	19840726
SU 1442075	A3	19881130	SU 1985-3884501	19850429
SU 1445558	A3	19881215	SU 1985-3885803	19850429
ES 545250	A1	19860516	ES 1985-545250	19850716
PRIORITY APPLN. INFO.:			JP 1983-138000	19830727
			JP 1984-117266	19840606
			EP 1984-108822	19840725

OTHER SOURCE(S): CASREACT 102:220858  
 GI



I



II

AB Naphthyridinecarboxylates I [R = (un)substituted 3-aminopyrrolidino; R1 = H, ester group] were prepd. Thus, I (R = 4-MeC6H4SO2, R1 = Et), prepd. in 7 steps from 2,6-dichloro-5-fluoronicotinonitrile via nicotinate II, was aminated with 3-(acetylaminopyrrolidine to give I [R = 3-(acetylaminopyrrolidino, R1 = Et], which was treated with 10% NaOH at 90-110° for 2 h to give I (R = 3-aminopyrrolidino, R1 = H) (II). II inhibited Streptococcus pneumoniae 1 infections in mice with ED50s of 15.2 mg/kg orally and 8.61 mg/kg, i.v.

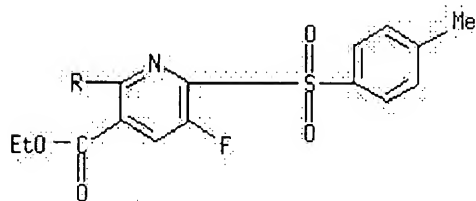
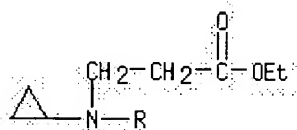
IT **96568-09-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and amination of, with pyrrolidine derivs.)

RN 96568-09-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[cyclopropyl(3-ethoxy-3-oxopropyl)amino]-5-fluoro-6-[(4-methylphenyl)sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L4           0 S L3

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L5           0 S L3

FILE 'REGISTRY' ENTERED AT 19:25:02 ON 01 SEP 2004

L6           STRUCTURE UPLOADED  
L7           0 S L6  
L8           5 S L6 FULL

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L10          0 S L9 AND HARTZ, R?/AU  
L11          0 S L9 AND ARVANITIS, A?/AU

FILE 'CAOLD' ENTERED AT 19:27:31 ON 01 SEP 2004

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L12          0 L8

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	ENTRY	SESSION
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STRUCTURE FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

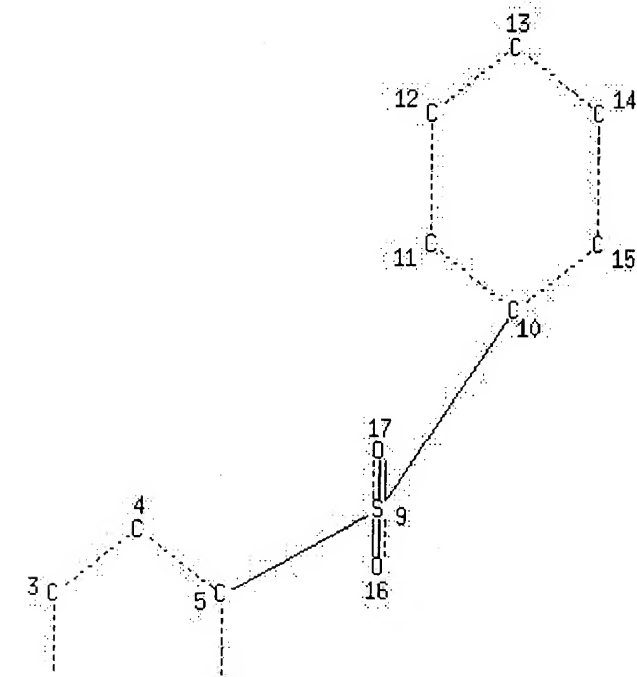
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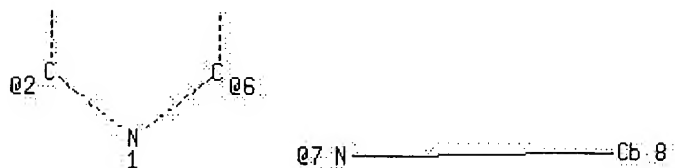
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L13 STR



Page 1-A



Page 2-A

VPA 7-2/6 S

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RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

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FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

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PROJECTED ANSWERS: 0 TO 0

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=&gt; s 113 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

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100.0% PROCESSED 1318 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

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=&gt; file hcaplus

COST IN U.S. DOLLARS

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TOTAL

ENTRY

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FULL ESTIMATED COST

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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h

eb c

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cg

eb

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FILE COVERS 1907 - 1 Sep 2004 VOL 141 ISS 10  
 FILE LAST UPDATED: 31 Aug 2004 (20040831/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L16 1 L15

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L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text      Cited References

ACCESSION NUMBER: 2002:888558 HCAPLUS  
 DOCUMENT NUMBER: 137:384852  
 TITLE: Preparation of 2,5-disubstituted pyridine, pyrimidine, pyridazine and 1,2,4-triazine derivatives for use as p38 inhibitors  
 INVENTOR(S): Green, Jeremy; Harbeson, Scott L.; Cochran, John E.  
 PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA  
 SOURCE: PCT Int. Appl., 78 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092087	A1	20021121	WO 2002-US17673	20020510
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
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EP 1392300	A1	20040303	EP 2002-752027	20020510

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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:

US 2001-290504P

P 20010511

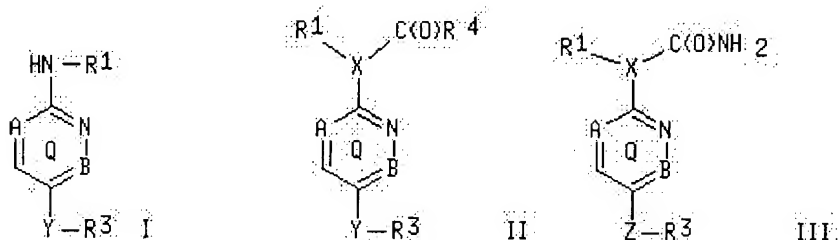
WO 2002-US17673

W 20020510

OTHER SOURCE(S):

MARPAT 137:384852

GI



AB The present invention relates to 2,5-disubstituted pyridine, pyrimidine, pyridazine and 1,2,4-triazine derivs. (shown as I, II, and III; e.g. [6-(2,6-difluorophenylamino)pyridin-3-yl]phenylmethanone) as inhibitors of p38, a mammalian protein kinase involved in cell proliferation, cell death and response to extracellular stimuli. The invention also relates to methods for producing these inhibitors. The invention also provides pharmaceutical compns. comprising the inhibitors of the invention and methods of using those compns. in the treatment and prevention of various disorders. In I, II, and III: A is N or CR; B is N or CR; X is N or CH; Y is C(O), CHOH, CH2, S, S(O), S(O)2, NH, NR, O or Z; Z is CHOH, -[(C2-C3)-alkyl]-, -S-[(C1-C3)-alkyl]-, -O-[(C1-C3)-alkyl]-, -NH-[(C1-C3)-alkyl]-, -[(C2-C3)-alkenyl]-, -[(C2-C3)-alkynyl]-, -O[(C2-C3)-alkenyl]-, -O[(C2-C3)-alkynyl]-, -S-[(C2-C3)-alkenyl]-, -S[(C2-C3)-alkynyl]-, -NH-[(C2-C3)-alkenyl]-, -NH-[(C2-C3)-alkynyl]-, -[(C1-C3)-alkyl]-S-, -[(C1-C3)-alkyl]-O-, -[(C1-C3)-alkyl]-NH-, -[(C2-C3)-alkenyl]-O-, -[(C2-C3)-alkynyl]-O-, -[(C2-C3)-alkenyl]-S-, -[(C2-C3)-alkynyl]-S-, -[(C2-C3)-alkenyl]-NH- or -[(C2-C3)-alkynyl]-NH-; the C atoms of Q may be optionally substituted with R. R1 = aryl, heteroaryl, carbocyclyl, heterocyclyl or C1-10 aliph., any of which may be optionally substituted; R3 = aryl, heteroaryl, carbocyclyl, heterocyclyl, or C1-10 aliph., any of which may be optionally substituted; R4 = NHR5, N(R5)2, OR5, C(O)OR5, -C(O)R5 or R6; each R5 = aryl, heteroaryl, carbocyclyl, heterocyclyl or C1-5 aliph.; R6 = aryl, heteroaryl, carbocyclyl, heterocyclyl or C1-5 aliph., any of which may be optionally substituted; each R = H, halo or a straight or branched chain C1-C4 alkyl; each of R1, R5 and R6 = optionally substituted with up to 4 substituents, each of which = halo; C1-C3 alkyl optionally substituted with NR'2, OR', CO2R' or CONR'2; O-(C1-C3)-alkyl optionally substituted with NR'2, OR', CO2R' or CONR'2; NR'2; OCF3; CF3; NO2; CO2R'; CONR'; SR'; COR'; SO2NR'2; SCF3; CN; NR'C(O)R'; NR'C(O)OR'; NR'C(O)C(O)R'; NR'SO2R'; OR'; OC(O)R'; OPO3H2; or N:CNR'2. R3 is optionally substituted with up to 4 substituents, each of which = halo; C1-C3 straight or branched alkyl optionally substituted with NR'2, OR', CO2R', SO2NR'2, N:CNR'2, R', or CONR'2; O-(C1-C3)-alkyl optionally substituted with NR'2, OR', CO2R', SO2NR'2, N:CNR'2, R', or CONR'2; NR'2; OCF3; CF3; NO2; CONR'2; R'; OR'; SR'; COR'; C(O)OR'; SO2NR'2; SCF3; N:CNR'2; or CN; R' = H; (C2-C3)-alkyl; (C2-C3)-alkenyl or alkynyl; a 5-8 membered aryl ring system, a 5-8 membered heteroaryl ring system or a 5-6 membered heterocyclic ring system, any of which may be independently and optionally substituted with 1 to 3 substituents = halo, methoxy, cyano, nitro, amino, hydroxy, Me or Et; provisos are given in the claims. Although the methods of prepn. are not claimed, ~8 example prepn. are included. IC50 or Ki values in  $\mu$ M ranges are given for inhibition of ATPase activity of p38 for 62



claimed compds.; for example, [6-(2,6-difluorophenylamino)pyridin-3-yl]phenylmethanone exhibits IC50  $\leq 1 \mu\text{M}$ .

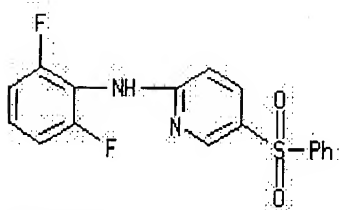
IT **475634-59-4P**, N-(2,6-Difluorophenyl)-5-(phenylsulfonyl)pyridin-2-amine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of 2,5-disubstituted pyridine, pyrimidine, pyridazine and 1,2,4-triazine derivs. for use as p38 inhibitors)

RN **475634-59-4** HCAPLUS

CN 2-Pyridinamine, N-(2,6-difluorophenyl)-5-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



*103(10)2  
posi  
isomer.*

REFERENCE COUNT:

8

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FULL ESTIMATED COST

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L2 O S L1

L3                   1 S L1 FULL

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L4                   0 S L3

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L5                   0 S L3

FILE 'REGISTRY' ENTERED AT 19:25:02 ON 01 SEP 2004

L6                   STRUCTURE UPLOADED

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L8                   5 S L6 FULL

FILE 'HCAPLUS' ENTERED AT 19:26:00 ON 01 SEP 2004

L9                   4 S L8

L10                  0 S L9 AND HARTZ, R?/AU

L11                  0 S L9 AND ARVANITIS, A?/AU

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L12                  0 S L8

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L13                  STRUCTURE UPLOADED

L14                  0 S L13

L15                  2 S L13 FULL

FILE 'HCAPLUS' ENTERED AT 19:28:52 ON 01 SEP 2004

L16                  1 S L15

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